



## ***Equal Employment Opportunity***

The Zia Company is an equal opportunity employer and has a strict adherence to a policy of non-discrimination. Each employee is an instrument of this policy.

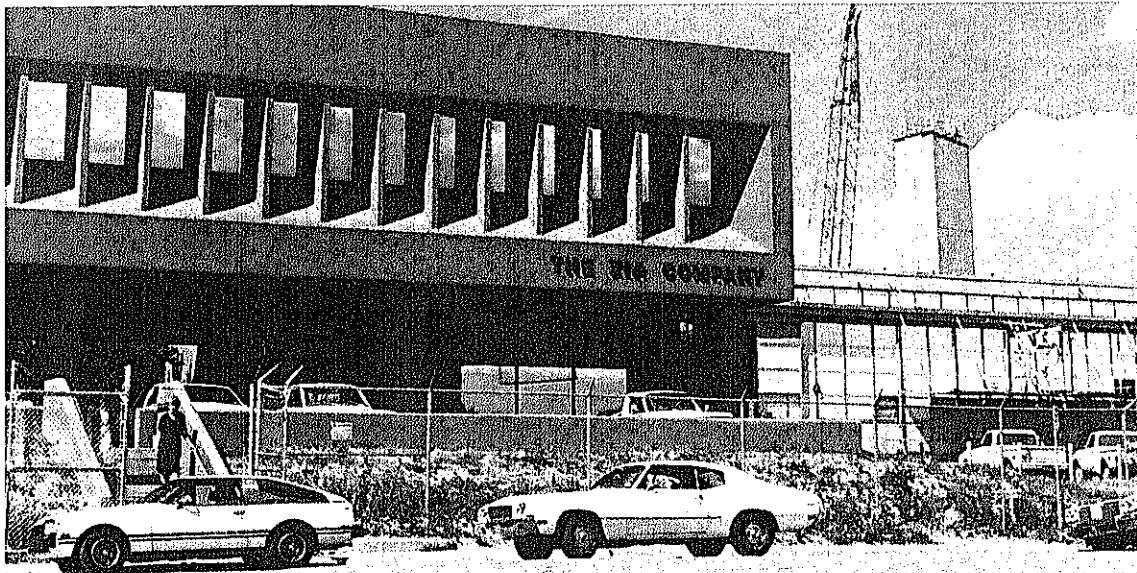
The Company has adopted this policy not merely because it is law, but because of the abiding moral conviction that it is right.

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## ***Photo credits***

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*The Zia Company  
Pajarito and West Jemez Roads  
Los Alamos, New Mexico 87544*



### ***Company History***

The Los Alamos project was primarily a military installation from January 1943 to April 1946 when The Zia Company was incorporated in the state of New Mexico in March 1946 at the request of the Manhattan District U.S. Corps of Engineers.

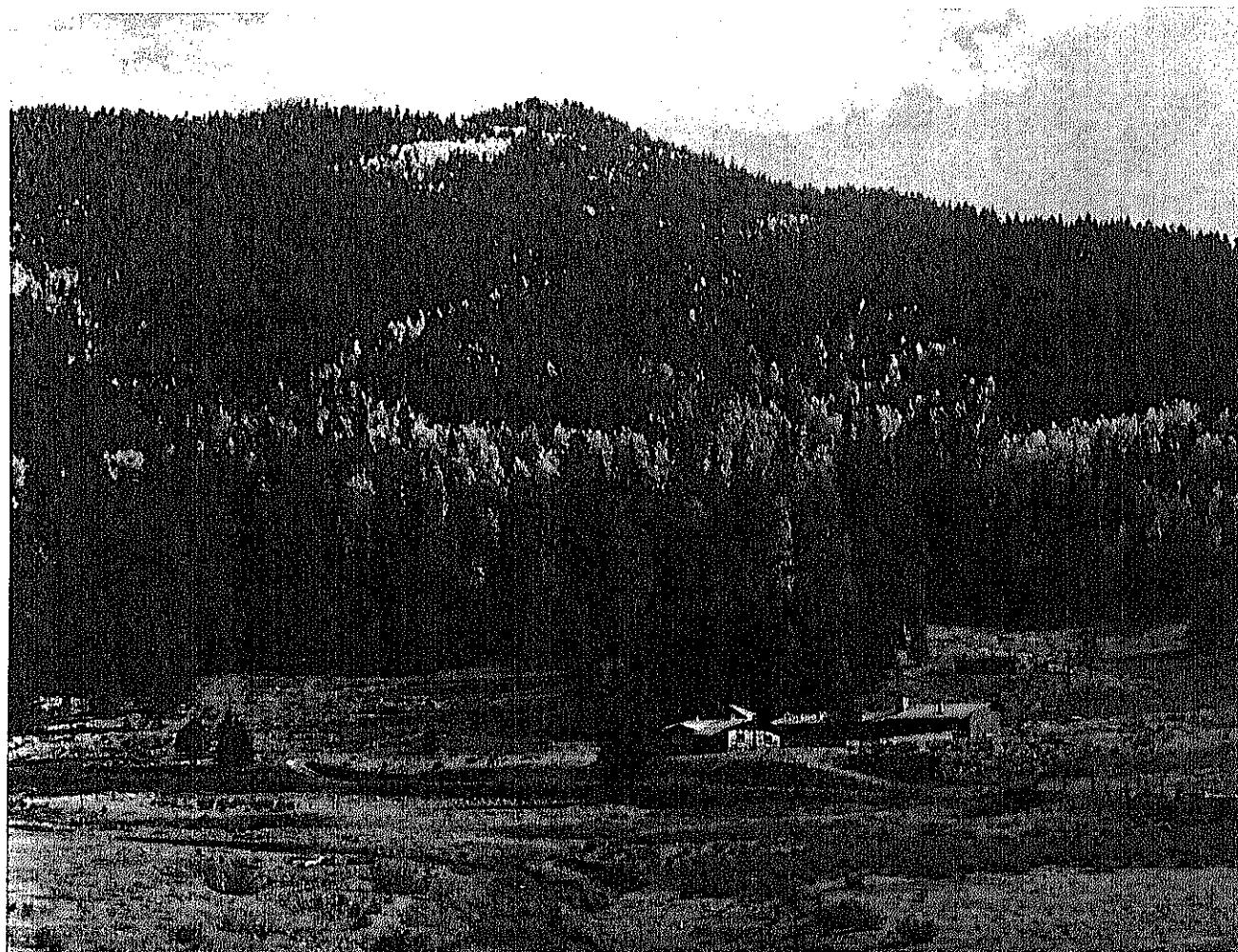
Los Alamos, New Mexico, birthplace of the atomic bomb, was originally known by the code name of "Zia Project" and is the source of the Company name. The Zia Company, a private contractor, is a wholly owned subsidiary of Santa Fe Industries, Inc.

The Company's prime contract is with the U.S. Department of Energy (DOE), the government agency assigned the re-

## ***Los Alamos & Northern New Mexico***

Five of North America's six climatic zones are within New Mexico, which is the fifth largest state. Los Alamos is high country at an average elevation of 7,000 feet. Clean air and clear skies are almost a trademark.

Summer evenings are usually cool enough to indicate a jacket, and, on the average, maximum temperatures reach 90 degrees only two days a year. The usual winter includes approximately 18 days when temperatures remain below freezing.





Because this area receives about 70 percent of the year's possible sunshine, solar-energy heating systems are quite efficient.

The humidity averages a comfortable 40 percent. Average annual precipitation is 18 inches with an average annual snowfall of 50 inches.

The near horizons to the west and north of Los Alamos are the Jemez Mountains at an elevation of 11,000 feet. The eastern horizon is formed by the 13,000-foot peaks of the Sangre de Cristo (Blood of Christ) Mountain Range, which is 30 miles across the valley of the Rio Grande.

State and local taxes are considered a real bargain by some newcomers from other states. Home insurance rates are reasonable because of the low crime and fire experience. Fire

The school system is excellent, and continuing and advanced educational opportunities are available for adults at both the high school and college levels.

Cultural activities and opportunities are plentiful, and there are myriad organizations devoted to special interests of all kinds. On a per capita basis, the community's public library enjoys a circulation more than four times greater than any other public library in New Mexico.

Parks, playgrounds, and recreational facilities are abundant for children and adults, and outdoor sporting opportunities are excellent. These include skiing, bicycling, ice skating, hunting, fishing, hiking, camping, tennis, golf, etc.

Within easy driving distance are dozens of ancient cliff dwellings, more than a half dozen thriving Indian pueblos, numerous mountain villages where Spanish is the principal language, national monuments, and national forests.

New Mexico's state capital (the oldest capital in the nation) is 34 miles southeast of Los Alamos. A mecca for tourists, Santa Fe is also a center for arts and crafts, both traditional and modern.

Another major nearby community is Espanola, 20 miles to the northeast on the banks of the Rio Grande at an elevation of 5,800 feet. The state's largest city is Albuquerque, 94 miles to the southwest, near the Sandia and Manzano Mountains.



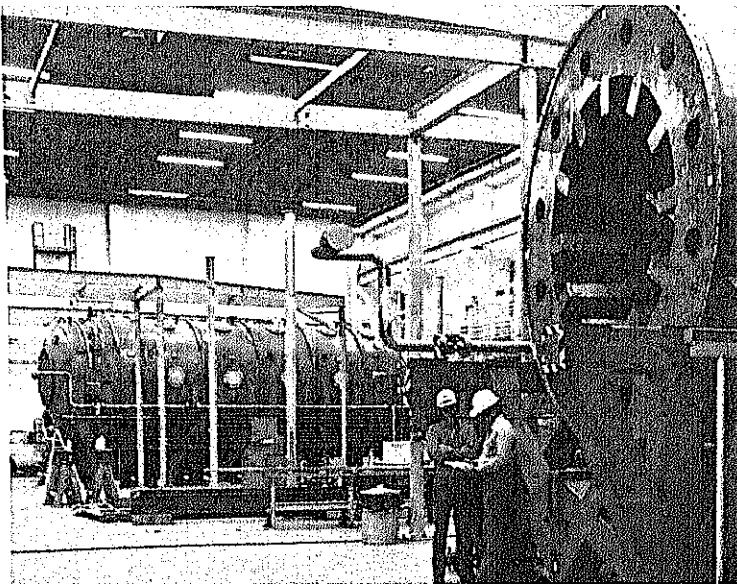


## ***Housing & Commuting***

Many of the Company's employees live in the surrounding areas of the Rio Grande Valley or Santa Fe. Many commuters are members of car pools or vanpools and travel arrangements are usually easily made.

- Los Alamos community-commuting distances range from one mile to seven miles.
- White Rock community-commuting distances range up to nine miles.
- Rio Grande Valley-commuting distances average about 30 miles.
- Santa Fe community-commuting distances are approximately 40 miles.

Local realtors will be happy to answer any inquiries regard-



## ***Employee Benefits***

Employee benefits at The Zia Company are similar to those of other companies. Salaried employees have available:

- paid vacations, sick leave, and holidays;
- health, dental, and life insurance;
- non-contributory pension plan;
- various leave provisions such as emergency, court, and military leave allowances.

Details of these benefits can be obtained from Company rep-

## ***Scope of Work***

The Zia Company provides professional services in all areas of operational support, construction, maintenance, and utilities operations for research and development facilities. Activities range from "state-of-the-art" requirements to day-to-day functions.

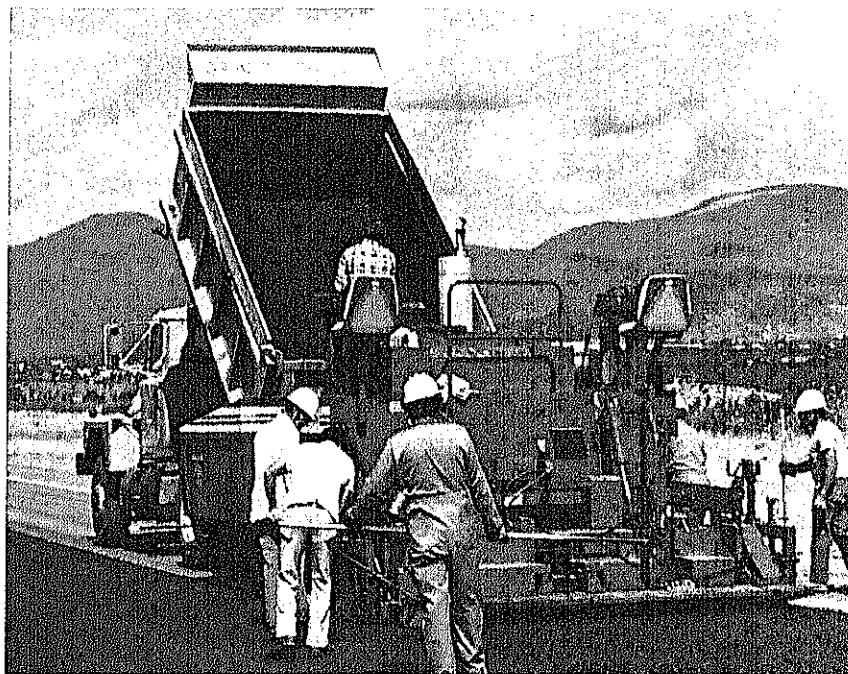
Under its prime contract with the U.S. Department of Energy, The Zia Company is a contractor servicing a wide variety of needs. Almost all of the work is done by Company personnel who are skilled in engineering, construction, fabrication, vehicle-fleet operation, and operating areas such as electrical, natural gas, and water utilities systems.

Only in rare cases has the Company subcontracted work to other firms. The Company utilizes all of the craft skills of the building trades and almost every engineering discipline.

Employees of the Company can expect a wide scope of work activities which will enhance their professional capabilities.

A partial list of Company services indicates the scope of activities:

- Performs architect-engineer functions for the Los Alamos National Laboratory (the Lab) and DOE.
- Operates, maintains, and plans for future needs of utilities systems, including gas, water, elec-



- Performs construction, alteration, and repair work.
- Collects and disposes of solid wastes.
- Constructs and maintains roads, streets, and parking lots.
- Operates the Los Alamos Airport.
- Operates the official taxi fleet.
- Disposes of salvage and surplus materials for
- Performs extensive shop fabrication in support of DOE and Laboratory programs.
- Provides maintenance and operations of facility systems and equipment, including engineering services and approximately 15 skilled craft services.
- Maintains hundreds of fire control and alarm systems.
- Maintains and services the fleet of approximately 1,100 government vehicles, 300 pieces of heavy mobile equipment, and 12,000 pieces of

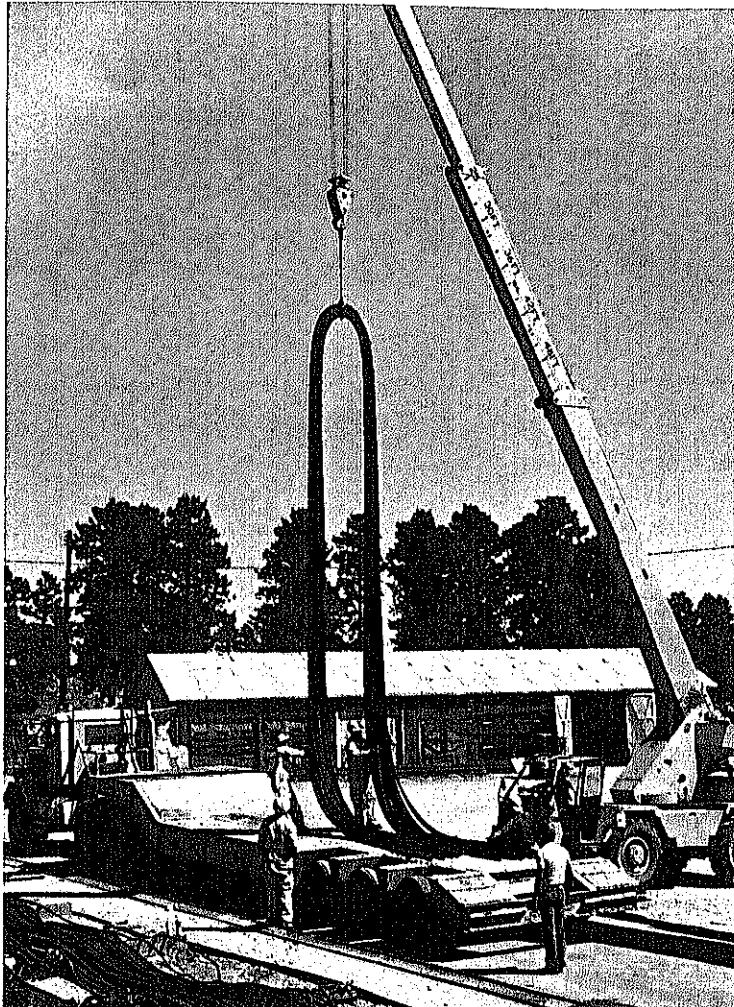
## ***The Working Environment***

In working for the Company, an employee will have the support of a number of various specialized sections.

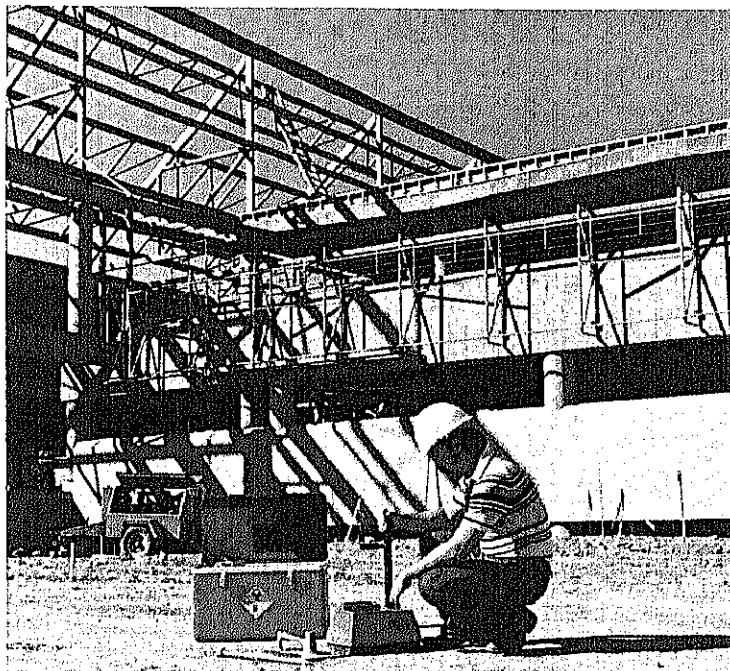
Personnel administers employee benefit programs and reviews pay programs for comparison with other industry pay levels. Craft contracts on a day-to-day basis are a Personnel responsibility. The Company training programs are designed and supervised by Personnel.

Relationships between personnel at all levels of the Company are on a first-name basis. Formality plays a minor role in the primary goal of getting the job done. Each individual chooses his own dress code consistent with health and safety considerations and basic good taste.





Interactions between divisions and sections are largely unhindered by protocol or formal channels of communications. Whenever an individual or group needs the support



readily available. Professionals are frequently reassigned for short-term or even long-term projects, depending on the individual's preferences and skills, as well as the Company's requirements.

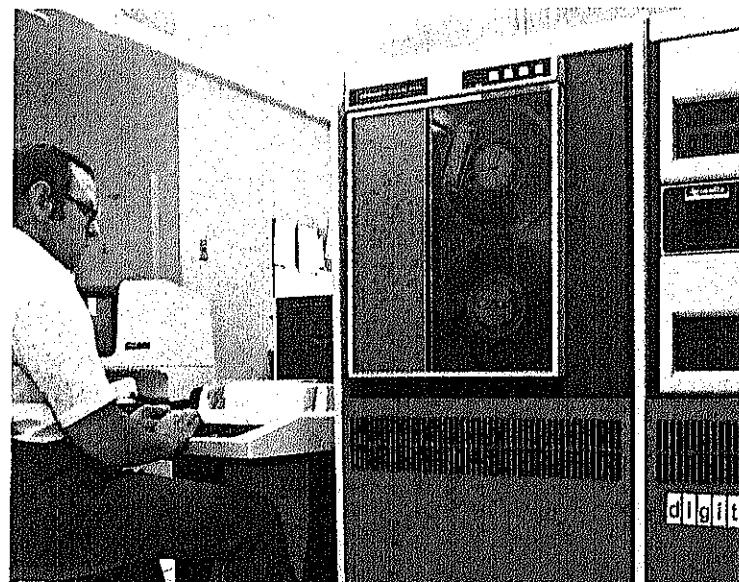
The Equal Employment Opportunity Officer reviews personnel actions such as promotions and relationships on the job for fairness and equal treatment.

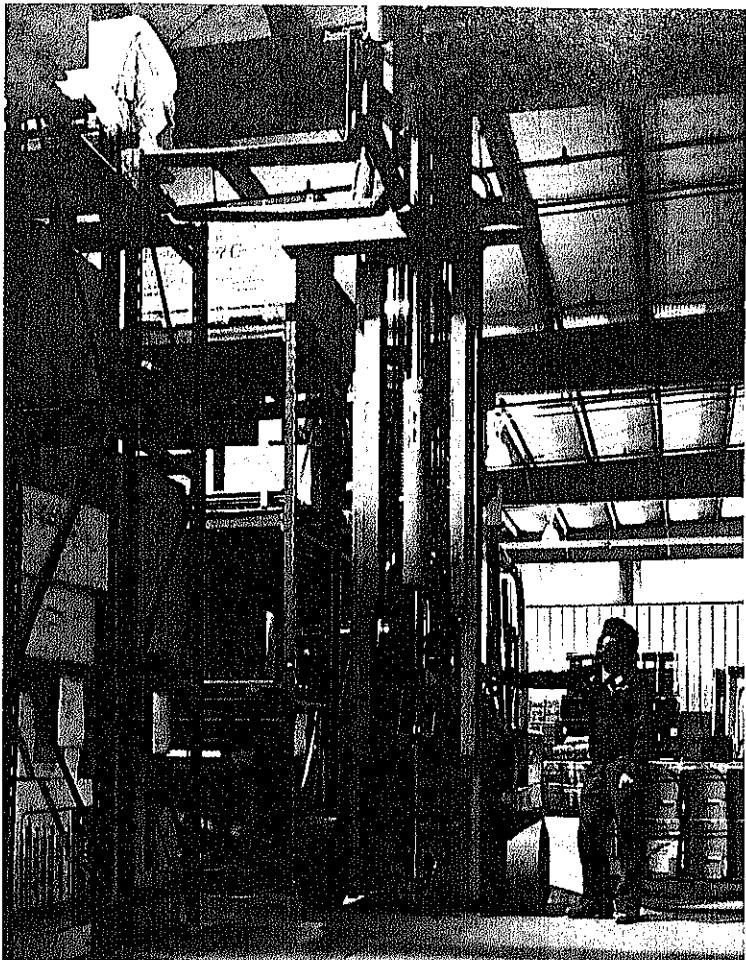
The Safety Section administers the safety program for employees. Safety is a way of life with The Zia Company, and constant supervision and job inspections have resulted in an enviable safety record.

Safety is a serious matter with the Company. Safety personnel make sure Company operations conform to national standards (OSHA, etc.). Safety-awareness training is a Zia employee's constant companion. Safety inspectors have authority to stop work if an unsafe condition exists.

Every effort is made to furnish employees information that may be needed for the performance of a job. The Fiscal Division is responsible for data collection and processing. These activities include the usual accounting and financial reports, payroll, and property accounting.

The Data Processing Section operates three in-house mini-computers. It also has ready access to the Los Alamos National Laboratory's Central Computing Facility for high-volume jobs. Sophisticated system work is performed by Data Processing,





Purchasing and Warehousing support operations by assuring that materials and tools are available to employees as needed. Most of the work of the Company can be classified into two types:

- Worked performed at the express direction of the Lab

- continuing operations such as utility systems, fleet and airport operations, and equipment and facilities maintenance.

If an employee's assignment is related to work orders from the Lab, he or she has access to the efforts of personnel from sections or divisions which service those work orders.

A work order may require the services of sections or divisions other than skilled crafts. Engineering provides feasibility studies, design, and construction services in mechanical, civil, electrical, and architectural fields. The Planning Section analyzes the work, detailing various operations and assigning estimated craft hours based on time standards for the work. The tracking of a work order is accomplished in the field by field engineers whose responsibility includes the completion of the work on schedule and within the estimate.

Data and cost information is available through a sophisticated data base containing the pertinent facts on each job. Access to the data base is by means of a computer terminal, and inquiry can be made from many geographical locations in Los Alamos to serve the work being done in these areas.

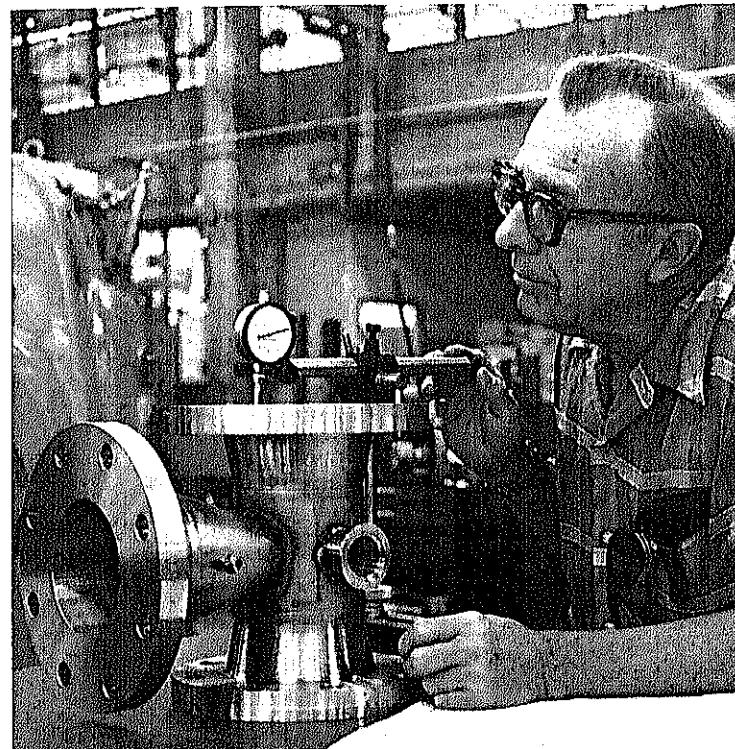
Skilled craftsmen perform the work in all types of working environments. Most work is performed under normal conditions, but some work takes special skills and know-how when that work is in technical areas or areas which may be subject to potential radiation.

Company knowledge, safety programs, and coordination with Lab personnel assure employees of safe working con-

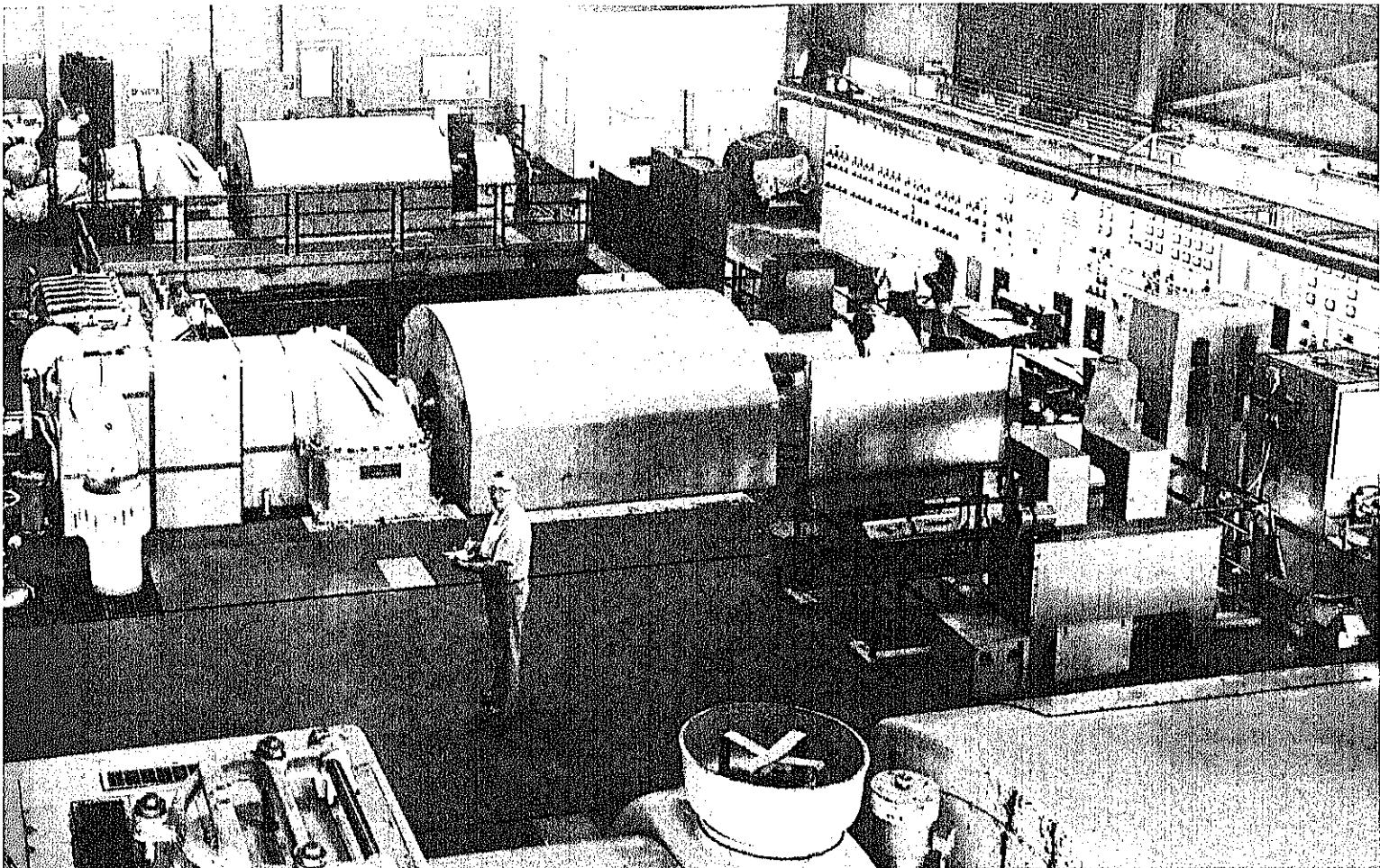
**Operating personnel include:**

- Sheetmetal Workers
- Ironworkers – Truck, Bus, and Taxi Drivers
- Roofers – Custodians
- Painters
- Linoleum Layers
- Carpenters
- Insulators
- Electricians
- Heavy-equipment Operators
- Mechanics
- Asbestos Workers
- Machinists
- Plumbers and Fitters
- Masonry Workers
- Warehousemen
- Laborers

Quality-assurance personnel check critical work such as special welding requirements or special components of work.



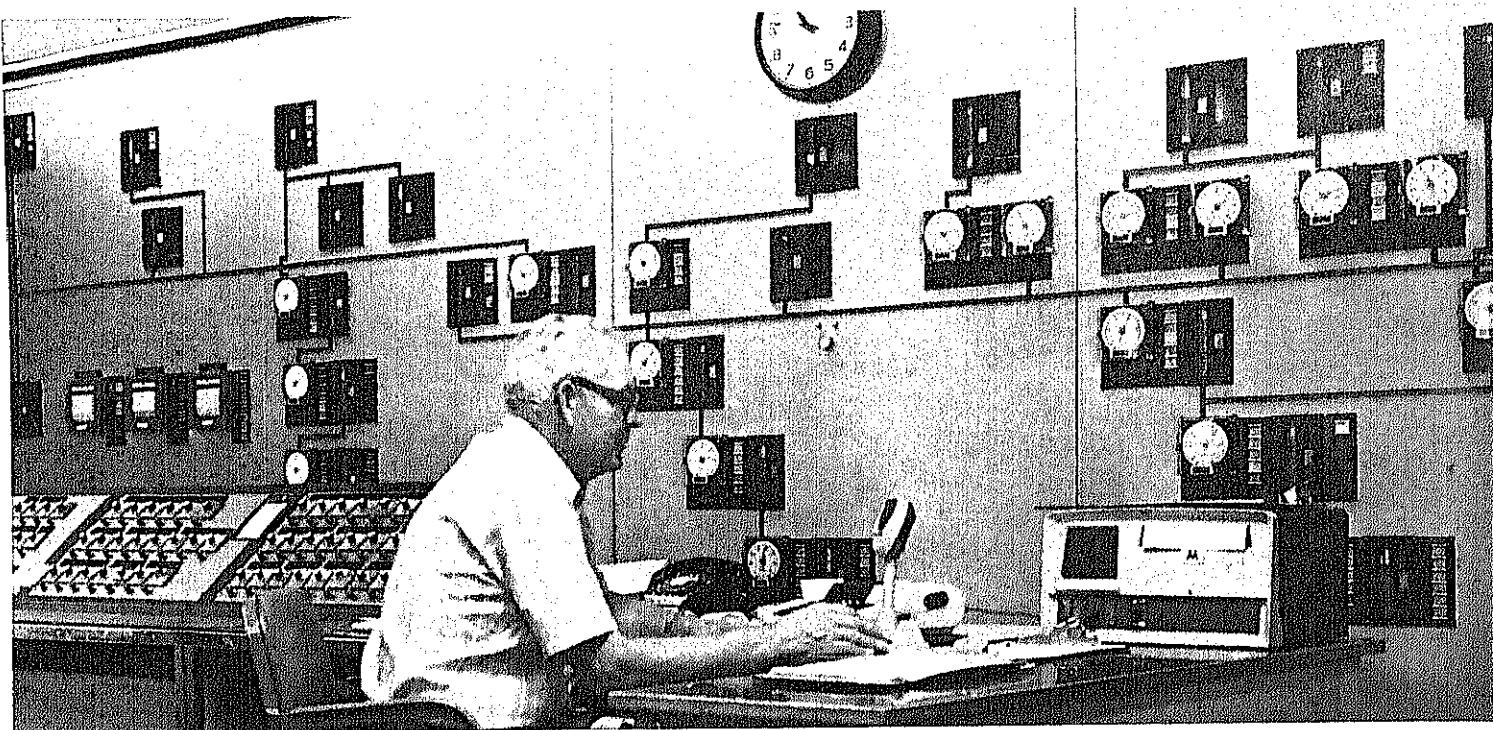
Continuous operations, such as utilities, are performed with-



Electrical utility operations involve both the generation of electrical power as well as the purchase of power. The power is distributed to both the community of Los Alamos as well as the technical areas of the Laboratory. An uninterrupted supply of power is essential on priority circuits, and many electrical distribution circuits are arranged so as to

Modern computerized systems are used in support of electrical utility operations.

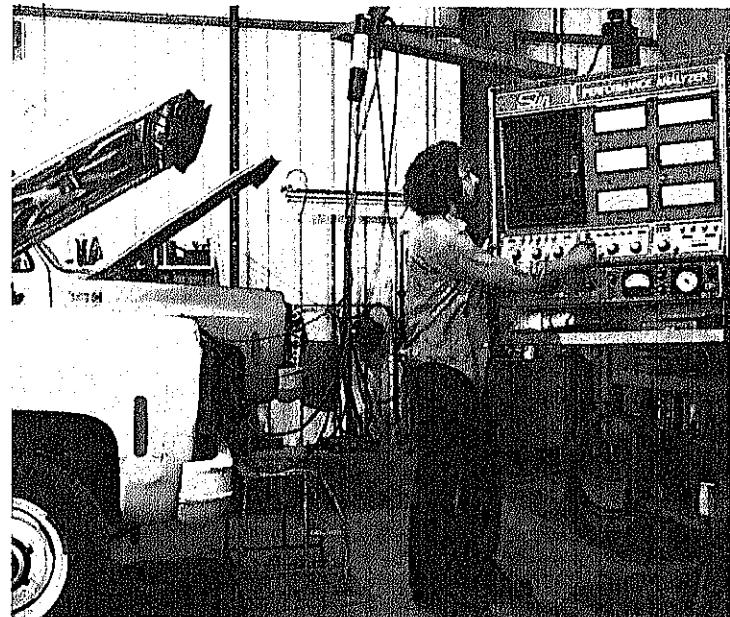
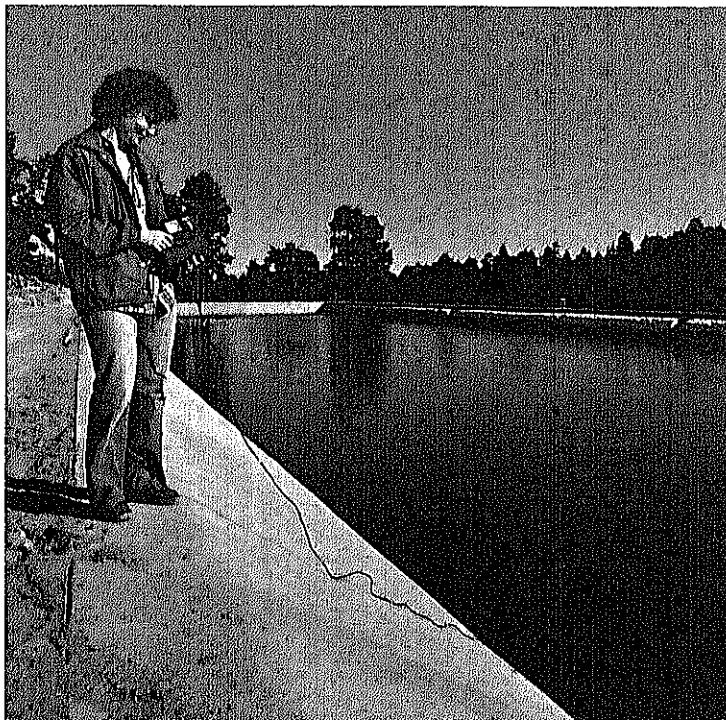
Steam plants are utilized for electrical generation and space and industrial heating. The largest of the four steam plants



The water-supply system originates in three separate well fields—one field is in the Rio Grande Valley. This requires a complex of pumping stations to lift water vertically an average of 2,000 feet and horizontally approximately eight miles to general storage reservoirs, which serve the Lab and the Los Alamos community on the Pajarito Plateau. The water-distribution system is sized to assure adequate fire protection in both the community and technical areas.

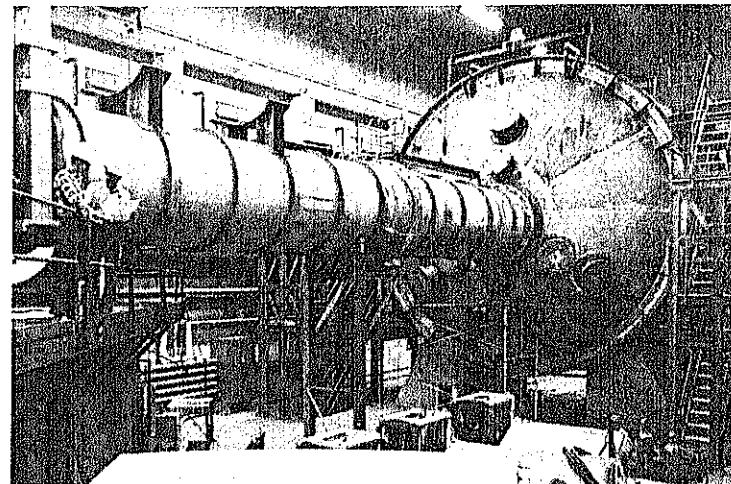
The natural gas system is fed from gas wells in the San Juan Basin northwest of Los Alamos through high pressure lines. Delivery of gas is taken at Los Alamos for technical area needs, including the steam generation facilities—the largest

Sewer systems in the technical area are a responsibility of The Zia Company. A number of treatment plants are operated by the Company, and the effluent from some of the sewer plants is reused as cooling water in the electrical generation plant.



In the Company's vehicle-fleet operations, modern test equipment is utilized to minimize repair and operation costs, and this fleet was one of the first to be operated exclusively on gasohol.

On-the-job training is conducted both formally and informally during regular working hours. Every salaried employee is given some classroom training in essential topics such as security and safety. Some jobs require a considerable amount of formal training, while other skills can be mastered informally.

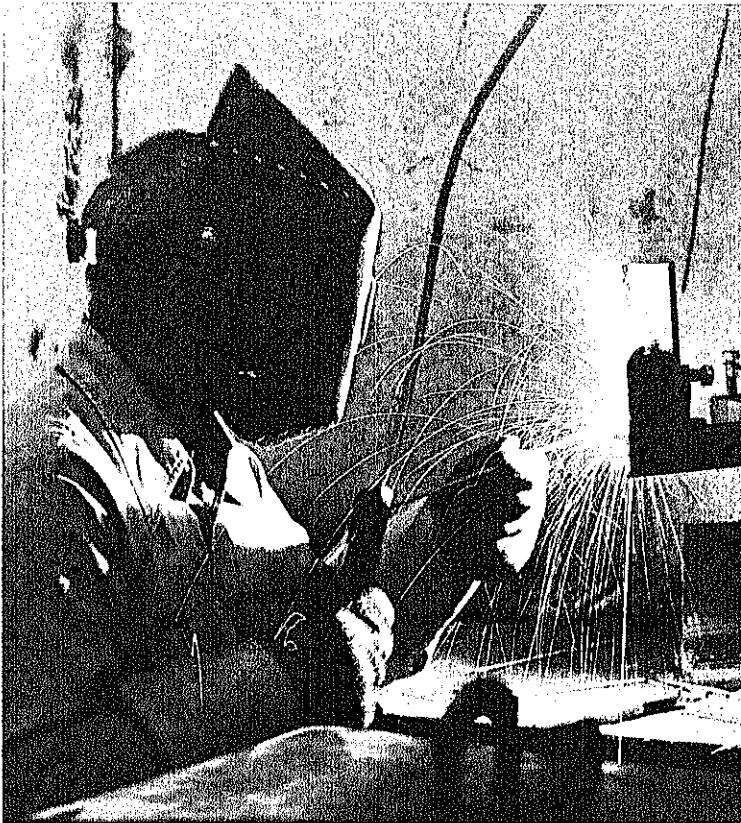


## ***Training***

With a wide variety of operations, training is, of necessity, an integral part of each employee's work. Training is comprised of four general classifications:

- On-the-job training
- Company-sponsored training
- Seminars and conferences
- Partial reimbursement of job-related courses

Various courses are offered for employees who wish to participate. Many employees have found these courses helpful in learning subjects useful to them in their present job or a job at the next higher level.



Professional societies and manufacturers frequently present courses, seminars, or conferences which are useful to employees. The Company provides employees with this type of training as may be necessary.

Partial reimbursement is made to employees who successfully complete approved courses in continuing education, colleges or universities, correspondence schools, etc.



### ***Working Conditions***

At Los Alamos, security of information and physical security are important. Most Company employees hold government "Q" security clearances which grant them access to technical information. Clearance is required for employees who handle

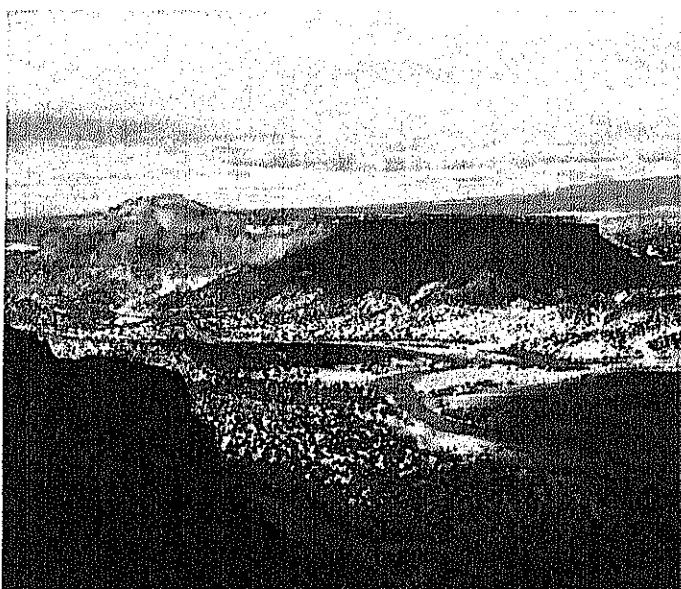
# Some additional facts about the Company and the area

## Population statistics

Los Alamos	18,000
Santa Fe	50,000

## Los Alamos geography

Altitude 7,300 feet above sea level, canyons and plateau areas, project areas 110 square miles, 150 annual cycles of freeze/thaw.



## Major employers

Los Alamos National Laboratory	7,000
The Zia Company	1,400

## Zia craft skills

Sheetmetal workers, ironworkers, painters, carpenters, electricians, heavy-equipment operators, mechanics, machinists, plumbers and fitters, masonry workers, warehousemen, laborers, service station attendants, truck-bus-taxi drivers, custodians, insulators, linoleum layers, roofers.

## Zia professional skills

Maintenance and construction management, engineering disciplines, design, and operations.

Data processing systems, accounting, personnel safety, quality control, and security.

## **Work functions**

Construction, laboratory support, maintenance, preventive maintenance, fabrication, fabrication of special racks for underground nuclear testing, custodial, fire alarms, and sprinkler systems.

## **Utilities systems**

Electrical generation, electrical distribution, natural gas distribution, water supply and distribution, sewer systems, steam systems.

## **Data processing**

On-line systems, batch systems, computers—PDP 11/34,

## **Supply**

Warehouse with approximately 10,000 common-use supplies. Procurement per year estimated from \$12 million to \$15 million.

## **Vehicles and equipment fleet**

1,100 vehicles of various sizes, including compacts and large dump trucks, buses, and taxis. Heavy equipment includes 250 units ranging from bulldozers to 140-ton cranes.

## **Work standards**

Construction estimates, time standards derived from experience, U.S. Navy standards, and H. B. Maynard standards. CPM (Critical Path Method) is used for sequencing and scheduling work.

## **Electric utility**

Co-generation steam turbines (20 megawatts). Electrical distribution circuits 115 KVA, 13.2 KVA to 110 volt. System demand 65 megawatts.

## **Steam utility**

450 PSI, production over 300 million pounds annually.

## **Water and sewage utilities**

Vertical lift 2,000 feet, three well fields, large storage capacity, sewer volumes approximately 400 million gallons per year. Zia environmental technicians assure effluents within required standards.

## **Quality-assurance techniques**

Magnetic particle, dye penetrant, ultrasonic, with access to other techniques, such as X-ray as required.

## **Procurement programs**

Recognized for its participation in minority business and small business purchases.

## **Preventive maintenance**

Computer-controlled scheduling of lubrication, relamping, equipment maintenance, filter changes, water and gas sys-

## **Custodial**

Five million plus square feet, all types of surfaces, controls through work standards.

## **Construction**

Davis-Bacon jobs—sizes range from \$2,000 to \$2,000,000.

## **Weapons test racks**

Custom-built heavy steel racks for test program at Nevada Test Site. Continuous production in job shop.

## **Machine shop**

Fully equipped vertical lathes, horizontal lathes, grinders, boring machines.

## **Building maintenance**

All types of maintenance on more than 1,000 buildings of

Notes . . .